

HLAVACKOVA, VL.; REUTT, H.

Effect of chlorpromazine on the development of motor activity.  
Sborn. lek. 65 no.5:159-163 My '63.

1. Fyziologicky ustav fakulty vseobecneho lekarstvi University  
Karlov v Praze, prednosta prof. dr. F. Karasek, DrSc. Fyziologicky  
ustav v Bialymstoku, vedouci doc. dr. R. Kordecki.

(CHICK EMBRYO) (POULTRY) (RATS) (AMPHIBIA)  
(CHLORPROMAZINE) (CENTRAL NERVOUS SYSTEM)  
(NOREINEPHRINE) (AMINOBTYRIC ACID)  
(MOVEMENT)

SEDLACEK, Jindrich; HLAVACKOVA, Vladimira; SVEHLOVA, Miroslava

Consideration on the problem of the development of inhibition from the earliest stages of ontogenesis. Cas. lek. cesk. 101 no.41:1222-1224 12 0 '62.

1. Oddeleni fyziologie detskeho veku, vedouci doc. dr. J. Sedlacek, Fyziologicky ustav fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. F. Kurasek, DrSc.

(REFLEX CONDITIONED) (INFANT NEWBORN)  
(GENETICS HUMAN)

HRUZA, Z.; JELENKOVA, M.; HLAVACKOVA, V.

The metabolism of fat and collagen in rats adapted to adrenaline and ACTH injections. *Physiol. Bohemoslov.* 13 no.1:81-86 '64.

1. Institute of Physiology, Czechoslovak Academy of Sciences, Prague.

\*

HLAVACKOVA, Zdenka

ND ✓ The selection of poppy for higher content of morphine.  
Zdenka Hlaváková (Karlova Univ., Prague), *Prepár* 27,  
388-83 (1956).—In 17 varieties of poppy and 41 hybrids  
the influence of the soil and external conditions was studied  
during two years. The analysis of alkaloids was made  
polarographically according to Baggesgaard-Rasmussen,  
*et al.*, in modification of Hřezina and Zuman (*Polarografie v*  
*Lékařství, Biochemie a Farmacie* 1952 (C.A. 47, 2251s)).  
The content of alkaloids depends on the genotype of the  
variety. The hybrids of the varieties with high content of  
morphine have the highest content of alkaloids. In cul-  
tivation the content of alkaloids was decreased by lower temp.  
and by greater rainfall toward the end of the vegetative  
period.  
K. Macák,

HLAVACOVA, Alena.

WIENER, H.J., MUDr; HLAVACOVA, Alena, MUDr; BARAT, Jozef, MUDr

Organization of dispensarization for malignant neoplasms in  
Skalica district. Cesk.gyn. 20 no.2:135-137 Mar 55.

1. Gyn. -por. odd. ONKZ Skalica.  
(NEOPLASMS, prevention and control,  
in Czech., dispensary serv.)  
(OUTPATIENT SERVICE,  
in Czech., dispensaries for prev. of cancer)

BYSTRICKY, Vojtech; BLASKOVIC, Dionyz; Technicka spolupraca : RAUS, Jan;  
HLAVACOVA, Irena

Problem of filtrable bacteria. III. Electron microscopy of L-cycle  
of Hemophilus influenza Pfeiffer. Cesk. biol. 4 no.10:597-599  
Nov 55.

1. Virologicky ustav CSAV Bratislava.  
(MICROSCOPY, ELECTRON,  
of hemophilus influenzae L-cycle.)  
(HEMOPHILUS INFLUENZAE,  
microscopy, electron, of L-cycle.)

WOLF, A.; HLAVACOVA, M.; PRSKAVCOVA, V.; MARESOVA, P.

Changes in food stuffs under the influence of ionizing radiations.  
J. Hyg. Epidem., Praha 1 no.2:156-162 1957.

1. Institute of Hygiene, Prague.

(ROENTGEN RAYS, eff.

on nutritive value & microbiol. of food stuffs)

(FOOD, eff. of radiations on

x-rays, on nutritive value & microbiol. of food stuffs)

EXCERPTA MEDICA Sec 17 Vol 5/12 Public Health Dec 59

3864. ON THE SECURING OF SANITARY CONDITIONS FOR FOODSTUFF SEMI-  
PRODUCTS - Příspěvek k hygienickému zabezpečení potravinových poloto-  
varu - Hlaváčová M. and Marešová P. Ust. Hyg., Praha - CSL.HYG.  
1959, 4/1 (7-13) Tables 3

In view of the wide use of semi-prepared food products in Czechoslovakia, the authors considered it necessary to examine them from the hygienic point of view. They tested organoleptically, chemically and microbiologically prototypes of semi-products experimentally prepared. Chemical and organoleptic tests on fresh samples and then on samples after 24 hr. of storing at temperatures of +5, +18 and +37°C. were made. Microbiological tests were made immediately, and then after 3 and 24 hr. at the storage temperatures of +5 and +18°C. From the chemical point of view, changes of pH and titrable acidity were tested. Microbiological tests were made as to the type and quantity of microorganisms. According to the results of all the tests performed, the semi-prepared food products have been divided into 3 groups. The first group, which is most resistant against external influences, includes semi-prepared products not entirely raw, as e.g. crisps, thick soups, etc. The second group comprises products of a more delicate nature from the sanitary standpoint, such as mayonnaise, meat prepared for frying, vegetable food, etc. Semi-prepared food products necessitating an increased cautiousness in production and sale have been classified into group 3. This includes products of raw minced meat, of fish and of raw dough of potatoes.

Simon - Prague



KAPITOIA, J.; BIEHA, O.; SCHUMEROVA, M.; Jedinaka spolupracovnik BIANOVICOVA, A.;  
HLAVATA, E.

Concentration of I-131 in normal and abnormal thyroid glands.  
Sborn. lek. 67 no.10:308-312 O '65.

1. Laborator pro endokrinologii a metabolismus, III. interni  
klinika fakulty vseobecneho lekarstvi University Karlovy v  
Praze (prednosta akademik J. Charvat).

HLAVATY, J.; GETLIK, A.; HLAVATA, L.; OTTIS, V.

Adrenal hemorrhage in newborn infants. Cesk.pediat.15 no.10:  
880-885 0'60.

1. Slovensky ustav pre doskolovanie lekarov v Trencine. Pediatricka  
katedra, veduci dr. A.Getlik. Patologicko-anatomicka katedra,  
veduci dr. V.Ottis.

(ADRENAL GLAND dis)

(HEMORRHAGE in inf & child)

(INFANT NEWBORN dis)

GETLIK, A.; CERNAY, J.; HLAVATA, L.; HLAVATY, J.; HORANSKY, V.; KOYSOVA, Z.

Growth curves of children up to 1 year of age in the Trencin district in 1952 and 1956 and the relation to nutrition. Cesk. pediat. 17 no.1: 11-20 Ja '62.

1. Pediatricka katedra SUDL v Trencine, veduci MUDr. A. Getlik.

(INFANT NUTRITION)  
(GROWTH in inf & child)

*HLAVATY, A.*  
HLAVATY, A.

Effect of anesthesia and of surgery on colloidal blood system in children. Polskie arch. med. wewn. 25 no.1a:241-244 1955.

1. Z kliniki chir. i ortop. dziecięcej A.M. w Gdansk; kier. doc. A.Maciejewski.

(ANESTHESIA, effects

on blood protein level in inf. & child.)

(SURGERY, OPERATIVE, blood in

postop. protein level & erythrocyte sedimentation in inf. & child.)

(BLOOD PROTEINS

level changes, eff. of anesth. & surg. in inf. & child.)

(ERYTHROCYTES, physiology

sedimentation, eff. of anesth. & surg. in inf. & child.)

HLAVATY, Antoni

Osteoarticular infection with Salmonella paratyphi B. Polski  
tygod. lek. 11 no.9:409-410 27 Feb 56.

1. Z Kliniki Ortoped. A M w Gdansk; kier. prof. dr. med.  
Zygmunt Ambros Gdansk, ul. H. Sawickiej 11.

(PARATYPHOID FEVERS, in infant and child,  
with femur & knee suppurative inflamm. (Pol))

(KNEE, diseases,  
suppurative inflamm. in paratyphoid fever in  
child. (Pol))

FEMUR, diseases,  
same.

HLAVATY, Antoni

Experimental studies on the regeneration of free tendon grafts.  
Chir. narzad. ruchu ortop. Pol. 29 no.3:331-335 '64.

1. Z Kliniki Ortopedycznej Akademii Medycznej w Gdansk (Kierownik:  
doc. dr. med. A. Senger).

TELESZYNSKI, Marian; HIAVATY, Antoni

Contribution to the operative treatment of idiopathic scoliosis.  
Chir. narz. ruchu 22 no.3:267-270 1957.

1. Z Kliniki Ortopedycznej A. M. w Gdansk. Gdansk, ul. Swierczewskiego  
4-6, Klinika Ortopetyczna.

(SCOLIOSIS, surg.

idiopathic, technics & early results (Pol))

HIAVATY, Bozena; HIAVATY, Antoni

Chondromatosis of shoulder. Chir. narz. ruchu 22 no.6:611-616 1957.

1. Z Wojewodzkiej Poradni Przeciwrumatycznej w Gdansk. Kierownik:  
dr J. Titz Kosko. Z Kliniki Ortopedycznej A. M. w Gdansk. Kierownik:  
prof. dr Z. Ambros.

(SHOULDER, neoplasms  
chondromatosis (Pol))

(CHONDROMA, case reports  
shoulder (Pol))



EXCERPTA MEDICA Sec 19 Vol 2/11 Rehabilitation Nov 59

2351. Notes on surgical treatment of paralytic flail feet W sprawie operacyjnego leczenia porażennej stopy wiotkiej. HŁAWATY A. Klin. Ortop. A. M., Gdansk *Chir. Narząd. Ruchu* 1958, 23/3 (237-246) Graphs 5 Tables 1 Illus. 5

Out of 183 operations (performed upon 135 subjects) 52 concerned the hip, 31 the knee and 100 the feet. Tendon transplantations were successful in 50% of cases; bone operations provided more constant and lasting results than tendon transfers did; the most reliable were resection arthrodeses; fusion operations performed with the use of bone grafts also proved satisfactory. (IX, 19)

657

PATYNSKI, Jerzy; HLAVATY, Antoni; BURKA, Jan; SZCZEKOT, Jozef; DAMKO,  
Stanislaw

Attempted clinical and radiological differentiation of senile  
and deforming changes of the hip joint. Chir.narz.ruchu ortop.  
polska 24 no.6:

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc.dr  
A. Senger.

(HIP pathol.)

HLAVATY, Antoni; PATYNSKI, Jerzy; SZCZĘKOT, Józef

Radiologic osteometry of the hip. Chir.narz.ruchu ortop.polska  
24 no.6:541-546 '59.

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc.dr  
A. Senger.  
(HIP radiogr.)

BURKA, Jan; HLAVATY, Antoni; PATYNSKI, Jerzy; SZCZEKOT, Jozef

Results of the examination of senile hips of inmates of a home  
for the aged in Wejherowo. Chir.narz.ruchu ortop.polska 24 no.6:  
553-559 '59.

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc.dr.  
A. Senger.

(HIP pathol.)

HLAVATY, Antoni; PATYNSKI, Jerzy; SZCZĘKOT, Józef; BURKA, Jan

Analysis of clinical and radiological pictures of deforming  
changes of the hip joint. Chir.narw.ruchu ortop.polska 24 no.  
6:561-568 '59.

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc.dr  
A. Senger.

(HIP pathol.)

HLAVATY, A.; HLAVATY, B.; DANKO, S.; PIATKOWSKA, H.

Results of the treatment of deforming changes of the hip joints  
by intra-articular hydrocortisone. Chir.narz.ruchu ortop.polska  
24 no.6:577-584 '59.

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc. dr  
A. Senger i z Ośrodka Reumatologicznego w Sopocie. Dyrektor dr  
J. Titz-Kosko.

(HIP dis.)

(HYDROCORTISONE ther.)

HEAVATY, Antoni

histological studies on the concrecence of resected tendon  
following suture (experimental studies on rabbits ). Chir -  
narzad. ruchu ortop. Pol. 29 no.5:641-647 '64.

1. Z Kliniki Ortopedycznej Akademii Medycznej w Gdansk (kierownik:  
doc. dr med. A. Senger).

HLAVATY, Antoni

Effect of surgical trauma on regenerative processes and adhesion of tendons. Chir. narząd. ruchu ortop. Pol. 29 no.6:681-688 '64

1. Z Kliniki Ortopedycznej Akademii Medycznej w Gdańsku (kierownik: doc. dr. med. A. Senger).



Experimental studies of the effect of hyaluronicase and hyaluronidase on the strength of tendon sutures. Chir. mrazd. vrbu ortop. vol. 30 no.1:25-30 '65.

1. I Kliniki Ortopedycznej Uniwersytetu Medycznego w Gdańsku  
(Kierownik: doc. dr. A. Senger).

HLAVATY, Antoni

The effect of hydrocortisone on the regeneration of sutured tendons in experimental animals. Chir. narzed. ruchu ortop. Pol. 30 no.2:125-130 '65

1. Z Kliniki Ortopedycznej Akademii Medycznej w Gdansk (Kierownik: doc. dr. med. A. Senger).

HLAVATY, Antoni

Effect of hydrocortisone on the regeneration of free tendon grafts. Chir. narzad. ruchu ortop. Pol. 30 no.3:263-268 '65.

1. Z Kliniki Ortopedycznej AM w Gdansk (Kierownik: doc. dr. med. A. Seiger).

HLAVATY, Bozena

Associated gold and ACTH therapy of rheumatoid arthritis. Polskie arch. med. wewn. 24 no.5a:925-931 1954.

1. Z II Kliniki Chorob Wewnętrznych Akademii Medycznej Gdanskiej.  
Kierownik: prof. dr med. St. Wszelaki, oraz z Wojewódzkiej Poradni  
Reumatologicznej w Gdansk. Kierownik: dr med. J. Tita-Kosko.

(ARTHRITIS, RHEUMATOID, therapy.

ACTH with gold)

(ACTH, therapeutic use,  
rheum. arthritis, with gold)

(GOLD, therapeutic use,  
rheum. arthritis, with ACTH)

HLAVATY, Bozena

Radiological picture of degenerative hip diseases. Reum.  
Pol. 2 no. 2:105-114 '64.

1. Z Wojewodzkiego Szpitala Reumatologicznego w Sopocie  
(Dyrektor: dr med. J.Titz-Kosko).

HIAVATY, Bozena; HIAVATY, Antoni

Chondromatosis of shoulder. Chir. narz. ruchu 22 no.6:611-616 1957.

1. Z Wojewodzkiej Poradni Przeciwreumatycznej w Gdansk Kierownik:  
dr J. Titz Kosko. Z Kliniki Ortopedycznej A. M. w Gdansk. Kierownik:  
prof. dr Z. Ambros.

(SHOULDER, neoplasms  
chondromatosis (Pol))

(CHONDROMA, case reports  
shoulder (Pol))

HLAVATY, A.; HLAVATY, B., DANKO, S.; PIATKOWSKA, H.

Results of the treatment of deforming changes of the hip joints  
by intra-articular hydrocortisone. Chir.narz.ruchu ortop.polska  
24 no.6:577-584 '59.

1. Z Kliniki Ortopedycznej AM w Gdansk. Kierownik: doc. dr  
A. Senger i z Ośrodka Reumatologicznego w Sopocie. Dyrektor dr  
J. Titz-Kosko.

(HIP dis.)

(HYDROCORTISONE ther.)

HLAVATY, Bozena; SZKODZINSKI, Stanislaw; ROZYNSKA, Krystyna; WCJNOWSKA, Bozena

Hydrocortisone therapy of small joints of the hand. Reumatologia  
Polska no.3:137-139 '60.

1. Z Ośrodka Reumatologicznego w Sopocie Dyrektor: dr med. Tita-  
Kosko, J.

(HYDROCORTISONE ther)  
(ARTHRITIS RHEUMATOID ther)  
(HAND dis)



HLAVATY, F.

"Socialist Competition in the Machine Industry." p. 203, Praha, Vol. 2, no. 5, May 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

HECKO, I., zapovedny vyskizny pracovník; SINTAJ, M.; HLAVATY, J.; KUKURA, J.;  
LIPKOVA, V.; SEVCIKOVA, A.; GRUNT, J.; GAZO, M.; MULLER, M.;  
VALASEK, V.

Prevention of infections in nurseries. Bratisl. lek. listy 34 no.9:  
1021-1045 Sept 54.

1. Z Krajskeho detskeho ustavu narodneho zdravia v Bratislave,  
riaditel dr. A.Novak (for Hecko, Sintaj, Hlavaty) 2. Z Hygienickeho  
ustavu LFŠU v Bratislave, prednosta akademik V.Much, a z Ustavu  
hygieny, oblastneho ustavu pre Slovenko v Bratislave, riaditel doc.  
dr. P.Macuch (for Kukura, Lipkova, Sevcikova, Grunt) 3. Z Ustavu  
pre vyskum vyzivy ludu v Bratislave, prednosta dr. A.Bucko. (for  
Gazo, Muller) 4. Z Vyskumneho ustavu epidemiologie a mikrobiologie  
v Bratislave, riaditel dr. J.Karolcek, z oddelenia pre parazitologiu,  
prednosta dr. M.Dziuban.

Spolupracovníci: a) z detskej kliniky: M.Krupska a skupina medikov  
(v rámci studentskej tvorivosti), V.Bohmerova, M.Cernacek, V.Kovac,  
D.Krivosova, M.Lickova, t.c. uz doktori mediciny. Pred zaciatkom  
vyskumnej prace riaditel KUNZ dr. A.Novak vykonal instruktax medikov:  
b) z Hygieniko-epidemiologickej stanice UNV Bratislava M.Zatkova  
c) z jasiel 1. na Blahovej ulici c.4.: M.Hlebakova (veduca sestra),  
J.Benedekova, G.Skotnarova, A.Nozkova, M.Lukovicova, E.Oriskova,  
V.Feherova; 2. na Feriencikovej ulici c. 6: H.Nemcekova (veduca  
sestra), M.Slobodova, N.Dobrotkova, A.Macenaurova, B.Stabelova.

(Continued on next card)

HECKO, I., zapovedny vyskimny pracovník: SINTAJ, M.; HLAVATY, J.; KUKURA, J.;  
LIPKOVA, V.; SEVCIKOVA, A.; GRUNT, J.; GAZO, M.; MULLER, M.;  
VALASEK, V.

Prevention of infections in nurseries. Bratisl. lek. listy 34 no.9:  
1021-1045 Sept 54 (Card 2)

d)z Hygienickeho ustavu LFSU a z Ustavu hygieny: O.Cikova,  
K.Rozholdova, L.Haragova, M.Jurcova, T.Orthova; e)z Ostavu pre  
vyskum vyzivy ludu: M.Popik, A.Kohutova, L.Sintajova, M.Krcnava;  
P.Ambrova, J.Kollarik, M.Astalosova.

(COMMUNICABLE DISEASES, in infant and child,  
prev. in nurseries)

(INFANTS,  
nurseries, prev. of communicable dis.)

HLAVATY, J.; GETLIK, A.; HLAVATA, L.; OTTIS, V.

Adrenal hemorrhage in newborn infants. Cesk.pediat.15 no.10:  
880-885 0'60.

1. Slovensky ustav pre doskolovanie lekarov v Trencine. Pediatrica  
katedra, veduci dr. A.Getlik. Patologicko-anatomicka katedra,  
veduci dr. V.Ottis.

(ADRENAL GLAND dis)  
(HEMORRHAGE in inf & child)  
(INFANT NEWBORN dis)

GETLIK, A.; CERNAY, J.; HLAVATA, L.; HLAVATY, J.; HORANSKY, V.; KOYSOVA, Z.

Growth curves of children up to 1 year of age in the Trencin district in 1952 and 1956 and the relation to nutrition. Cesk. pediat. 17 no.1: 11-20 Ja '62.

1. Pediatricka katedra SUDL v Trencine, veduci MUDr. A. Getlik.

(INFANT NUTRITION)  
(GROWTH in inf & child)

CZECHOSLOVAKIA

J. HLAVATY, Okres Institute for National Health (Okresni Ustav Narodniho Zdravi,) Pribram.

"Neurotic Depression, Its Origins and Hydrotherapy."

Prague, Activitas Nervosa Superior, Vol 5, No 2, May 63; p 226.

Abstract: Brief report on conclusions and recommendations from study with 45 neurotic patients divided into either K (kalt, cold) and W (warm) types. Cold showers and baths stimulate and on a long-term basis increase the excitability of the sympathetic system; warm baths sedate and depress it. Thus applications of these principles may permit a decrease of the demand for pharmacotherapy in mild states of neurotic depression.

1/1

HLAVATY, L.

CZECHOSLOVAKIA/Optics - Photography

K-13

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 24242

Author : Hlavaty L.

Inst : ~~Not Given~~

Title : New Method for Regulating the Exposure in Photography

Orig Pub : Jerna mech. a opt., 1957, 2, No 5, 140-143

Abstract : An explanation of the concept "light value" is given and the advantages of the use of the "light value" scale for determining the exposure are indicated.

Card : 1/1

CZECHOSLOVAKIA/Optics - Photography

K-13

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 24252

Author : Hlavaty L.

Inst : ~~Not Given~~

Title : Calculations When Working With Enlargers.

Orig Pub : Jomna mech. a opt., 1958, 3, No 1, 8-12

Abstract : Examples are given of calculations of enlargement for a specified distance from the negative to the plane of the image, or, conversely, for determining this distance for a given enlargement, and calculation of the depth of field.

Cerd : 1/1



CZECHOSLOVAKIA/Optics - Optical Technology.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 14059

Author : Hlavaty. L.

Inst : -

Title : Present Day Status of the Technique of Projection of  
Diapositives.

Orig Pub : Jerna mech. A opt., 1958, 3, No 5, 146-152, 172

Abstract : Problems of construction of diaprojectors are considered  
and ways of further developments in this field are indicated.

Card 1/1

HLAVATY, L.

"Design and development of the Flexaret reflex camera."

JEDNA MECHANIKA A OPTIKA, Praha, Czechoslovakia, Vol. 4, No. 6, June 1959.

Monthly List of East European Accessions (EEA1), LC, Vol. 8, No. 9, September 1959.

Unclassified.

HLAVATY, L., Ing.

"Mechanization of control in the machine industry" by Rudolf Maryrcak.  
Reviewed by L. Hlavaty. Jomna mech opt 9 no.10:324 0 '64.

HLAVATY, L., in2.

"Photographic practice" by H.Stapf. Reviewed by L.Hlavaty.  
Jenna mech opt 5 no.3:105 Mr '60.

HLAVATY, L., inz.

Possibilities of 8mm film. Jemna mech opt 7 no.6:190-192 Ja  
'62.

1. Meopta, n.p., Prerov.

HLAVATY, L., inz.

"Capillary soldering" by A. Slansky and J. Wollmann. Reviewed by  
L. Hlavaty. Jemna mech opt 7 no.10:322 0 '62.

HLAVATY, L., inz.

"Automation of resistance welding" by [inz.] Ladislav Pliva. Reviewed  
by L. Hlavaty. Jemna mech opt 7 no.11:360 N '62.

HLAVATY, Y.

Telephone on the locomotive, p.200.( Zeleznicar. Praha. Vol. 6, no. 8. Aug. 1956.)

SG: Monthly List of East European Accessions (SEAL) LC, Vol. 6, no. 7, July 1957. Uncl.



HLAVATY, M.

"What is the reason?"

p. 310 (Zeleznicar) Vol. 7, no. 12, Dec. 1957  
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

YUGOSLAVIA / Analytical Chemistry. Analysis of Inorganic E-2  
Substances.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 999.

Author : Krajovan - Marjanovic, V., Hlavaty, M., Habekovic,  
M., Cukovic, V.

Inst : Not given.

Title : The Electrographic Method for Determining Alloying  
Elements in Steels.

Orig Pub: Kemija u industriji, 1958, 7, No 2, 33-38.

Abstract: Methods for the electrographic determination of  
Cr, Ni, Co, Mo and V in steels using Schleicher-  
Schull 576 and Whatman No 50 were developed. To  
determine 5-13% of Cr, a mixture of 0.5 M  $\text{Na}_2\text{CO}_3$   
[sic] and  $\text{NaNO}_3$  (3:1) solutions is used as the  
electrolyte and as the reagent for  $\text{CrO}_4^{2-}$  — a 1%

Card 1/4

YUGOSLAVIA / Analytical Chemistry. Analysis of Inorganic E-2 Substances.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 999.

Abstract: diphenylcarbide solution (followed by treatment with 5% acetic acid). In the Ni determination, the electrolyte used is a mixture (1:1:1:2) of 5%  $(\text{NH}_4)_2\text{S}_2\text{O}_8$ , 5% NaF, 0.5M sodium potassium tartrate and 5% tartaric acid solution;  $\text{Ni}^{2+}$  is determined with a 2% dimethylglyoxime solution. For the determination of Co, 2N solution of ammonium acetate and as the reagent a 2% solution of  $\alpha$ -nitroso- $\beta$ -naphthol are used. For the determination of Mn a 0.5M solution of sodium potassium tartrate serves as an electrolyte; prior to the determination, Mn is converted into a cyanide complex by treatment with a mixture of 1% solutions of KCN and  $\text{NH}_4\text{OH}$ , is acidified by 5%  $\text{H}_2\text{O}_2$  to  $\text{Mn}^{4+}$  and then is determined with 1% ben-

Card 2/4

YUGOSLAVIA / Analytical Chemistry. Analysis of Inor- E-2  
ganic Substances.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 999.

Abstract: zidine acetate solution. For the determination of Mo is used a mixture (1:1:1) of 0.5 M sodium potassium tartrate, 0.5 M ammonium citrate and a 5% solution of  $(\text{NH}_2)_2\text{C}_2\text{O}_4$  are used as the electrolyte; Mo is determined by a successive treatment with a 10% solution of potassium ethyl xanthogenate and 10% HCl. Ten percent  $\text{HNO}_3$  serves as the electrolyte for V; the vanadyl is acidified with a 5%  $\text{KMnO}_4$  solution to  $\text{V}^{5+}$ , and then is treated consecutively with 5%  $\text{SnCl}_2$  and  $\text{C}_6\text{H}_6\text{NH}_2$  solutions. In all of the cases, the current density was 20 ma/cm.<sup>2</sup>; voltage was 1.5 mv.; the duration of electrographic analysis was 60

Card 3/4

YUCOSL.VLA / Analytical Chemistry. Analysis of Inor- E-2  
ganic Substances.

abs Jour: Ref Zhur-Khimiya, No 1, 1959, 999,

Abstract: seconds. For studying the microstructure of  
steel, a 0.5 M  $K_4Fe(CN)_6$  solution is used as  
the electrolyte and a 5% solution of acetic  
acid as the reagent. -- T. Levi.

Card 4/4

25

HLAVATY, M.

TECHNOLOGY

Periodical: ZELEZNICAR. No. 12, Dec. 1958.

HLAVATY, M. Railroad repair shops are responsible for the developemtn of transportation. p. 264.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3  
March 1959 Unclass.

HLAVATY, M.

The Most railroad station calling on ultrashort waves. p. 317.

ZELEZNICAR. (Ministerstvo dopravy Praha, Czechoslovakia.  
Vol. 2, no. 6, 1959.

Monthly List of East European Accession (EEAI), LC Vol. 9, no. 2  
Feb. 1959.

Uncl.

BOJANOVSKA, A.; HLAVATY, P.

Mucinosis follicularis. Cesk. dermat. 40 no.2:119-121 Ap'65.

1. Dermatovenerologická katedra Lekárskej fakulty University  
Komenského v Bratislave (veduci: prof. dr. L. Čmel, DrSc.).



LEGEL, E., ZABOŇKOVÁ, M., HLAVATÝ, P., ZANOVSKÁ-EVERNOVA, E.,  
BROUSOVÁ, M., HAJTMAN, Z., HORŇICKÝ, L.

Skin damage caused by working with oils. Cesk. dermat. 40 no.2:  
92-96 Apr'64.

1. Dermatovenereologická katedra (vedoucí prof. dr. L. Chmel,  
DrSc.) a katedra farmakologie (vedoucí doc. dr. V. Kovalčík,  
CSc.) Lékařské fakulty Univerzity Komenského v Bratislavě.

HLAVATY, Pavol, inz.

Effect of the exchange of a defective lathe for one overhauled. Podn org 18 no. 3:122-125 Mr '64.

1. Tovarny na obrabeci stroje, Trencin.

SINKA, L.; HLAVATY, P.

Analysis and follow-up study of patients with urticaria from  
the material of a Dermatological Clinic in Bratislava, 1959-63.  
Cesk. dermat. 40 no.4:217-224 Ag '65.

1. Dermato-venerologicka katēdra Lekarskej fakulty Univerzity  
Komenskeho v Bratislave (veduci prof. dr. L. Chmel, DrSc.).

HERFORD, K.; HLAVATY, V.

Comparison of increased level of diastase and lymphopenia  
in 18 cases of acute pancreatic necrosis. Sborn. pathofysiol.  
trav. vyz. 5 no.1:8-11 Aug 1951. (CIML 21:1)

1. Of the First Clinic for Internal Diseases (Head -- Prof. M.  
Netousek, M.D.) of Charles University, Prague.

HLAVATY, V.; BLEKTA, M.; CHYTIL, M.; BENEL, J.; VALNICEK, J.; BENEDOVA, L.

Changes in the blood volume during pregnancy and in late gestoses investigated with the aid of I-131 HSA and Cr51 labeled erythrocytes. Sborn. lek. 67 no.8/9:240-247 Ag '65.

I. Biofyzikalni ustav (prednosta doc. dr. Z. Dienstbier, DrSc),  
II. gynekologicko-prord. klinika (prednosta prof. dr. J. Lukas, DrSc.) a II. interni klinika (prednosta prof. dr. F. Herles, DrSc.) fakulty vseobecneho lekarstvi University Karlovy v Praze.

L 13304-66 EWT(m)

ACC NR: AP6006010

SOURCE CODE: CZ/0053/65/014/004/0276/0276

AUTHOR: Hlavaty, V.; Zak, M.

ORG: Department of Biophysics, Faculty of General Medicine, Charles University,  
Prague (Biofyzikalni ustav Fakulty vseobecneho lekarstvi Karlove University)

TITLE: Changes of conductivity of blood serum in relation to dose of whole-body  
radiation [This paper was presented during Biophysical Days, Brno, 11 June 1964.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 276

TOPIC TAGS: radiation drug effect, blood serum, rabbit, electric conductivity,  
potassium chloride

ABSTRACT: Statistically significant, reproducible increase in conductivity  
of serum of rabbits appeared within 15 minutes after 1000r whole-body  
radiation; it peaked at the fourth hour; even 250r perceptibly increased  
the electrical conductivity. Study indicates that the phenomenon is due to  
an increase in K and Cl ions in the serum of irradiated animals. [CPRS]

SUB CODE: 06 / SUM DATE: none / ORIG REF: 001

Card 1/1 FW.

HLAVATY, V.; BENDOVA, L.; JIROUNEK, P.; ZAK, M.

Relation between the energy of x-ray radiation and the  
biological response of the organism. Cesk. radiol. 20  
no.1:43-49 Ja '66.

1. Biofyzikalni ustav fakulty vseobecneho lekarstvi  
Karlovy University v Praze (prednosta prof. dr. Z. Dienstbier,  
DrSc.).

HLAVATÝ, VACLAV

Hlavatý, Václav. On Lie's sphere geometry. II. Congruences. (Elementary properties.) Rozprawy II. Třidy České Akad. 51, 15 pp. (1941). (Czech)  
 Hlavatý, V. On Lie's sphere geometry. III. Congruences. (Fundamental equations.) Rozprawy II. Třidy České Akad. 52, 28 pp. (1942). (Czech)  
 Hlavatý, V. On Lie's sphere geometry. IV. Congruences. (Integrable connections.) Rozprawy II. Třidy České Akad. 52, 20 pp. (1942). (Czech)  
 Summaries of these papers are reviewed above.

Source: Mathematical Reviews, 1948, Vol 9, No. 1



HLAVATY, V.

HLavaty, V. Zur Lie'schen Kugelgeometrie. III. Kongruenzen. (Grundgleichungen.) Acad. Tchèque Sci. Bull. Int. Cl. Sci. Math. Nat. 43, 80-86 (1942).

[For part II cf. the preceding review.]

The set of straight lines, the Plücker coordinates of which are given by the equation  $p = p(\eta^1, \eta^2)$  is called a congruence. The complexes  $p, p_1 = \partial_1 p, \partial_2 \partial_3 p$  determine the oscillating space  $\sigma_3$ . The dimension  $n$  of  $\sigma_3$  can be 3, 4 and 5. The author introduces some invariant vectors and tensors which appear as coefficients in the Gauss equation and the Weingarten equation belonging to the congruence. Differential relations between these quantities are given for  $n=3, 4$  and 5; from which it is seen that in either case the congruence is determined uniquely by these quantities.

J. Hlavaty.

Source: Mathematical Reviews, 1948, Vol. 9, No. 1

HLAVATY, V.

HLavaty, V. Zur Lie'schen Kugelgeometrie. IV. Kongruenzen. (Integrable Übertragung.) Acad. Tchécosl. Sci. Bull. Int. Cl. Sci. Math. Nat. **43**, 185-189 (1942).

The complexes  $p$  and  $v = e^*p$ , together [see the preceding review] define a linear parabolic congruence. [This congruence is singular if (1)  $(v, v) = a_{\alpha\beta}e^{\alpha}e^{\beta} = 0$ . The vectors  $e^{\alpha}$  and  $e^{\beta}$  of the two singular congruences are determined by (1) up to an arbitrarily chosen factor. This factor is further determined by means of the tensors introduced in the paper reviewed above. With these normalized vectors a metric connection  $\Gamma^{\alpha}_{\beta\gamma}$  with vanishing curvature tensor is introduced. This connection is not invariant under the transformation  $p \rightarrow fp$ . An  $f$ -invariant connection is obtained from  $\Gamma^{\alpha}_{\beta\gamma}$  and  $\{f^{\alpha}_{\beta}\}$ .  
J. Haantjes (Amsterdam)

Source: Mathematical Reviews, 1943, Vol 9, No. 1

\*Hlavaty, Václav. Projektivní Geometrie. I. Útvary jedno-parametrické. [Projective Geometry. I. One-Parameter Systems]. Melantrich, Prague, 1944. 383 pp. This textbook deals with one-parameter families of linear and quadratic figures (of points on a straight line, of lines in a pencil, of points on a conic, of conics with four points common or with four tangents common, of straight lines on a quadric, etc.). A projective property is defined as an invariant property relative to the groups of projective transformations in a figure. The construction of the theory is based on a projective scale on the real straight line; this scale is constructed by means of the quadrangle. The proofs are not always rigorous. The complex points of the figures are also considered; the book contains many elementary synthetic projective constructions of figures, e.g., the constructions of conics. The dual considerations, theorems, and constructions are also included. F. Vykichlo (Prague).

Source: Mathematical Reviews,

Vol 11 No. 3

Smw.  
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R88

*Flavaty, Václav*

\***Flavaty, Václav.** *Differentielle Liniengeometrie.* Autorisierte Übersetzung aus dem Tschechischen Originaltext von Max Pirl. P. Noordhoff, Groningen, 1945. xxii + 568 pp.

By using Plücker coordinates, a straight line can be made to correspond to a point on a four-dimensional quadric in a five-dimensional projective space (called the  $K$ -quadric in  $K$ -space). The goal of this book is to study systematically the differential geometry of the  $K$ -quadric and its submanifolds and to carry the results back to the corresponding line-manifolds. For instance, a  $K$ -curve on the four-dimensional  $K$ -quadric, and with it the corresponding ruled surface, is determined by three curvatures. This point of view for differential line geometry has been investigated before in papers by W. Haack, K. Takeda and J. Kanitani [references on p. vii], but nowhere in as great detail as here. It is especially valuable in studying properties of ruled surfaces, line congruences and line complexes, and allows the author to carry through projective, affine and metric studies at the same time. However, the basic correspondence is hard to use in situations where the line is not considered the primary element, and questions which lead to point set studies are left practically untouched. The tensor calculus is used throughout the book; those parts of the tensor calculus which are needed in the text are presented concisely in a thirty-one page appendix.

Source: *Mathematical Reviews*,

Here we can only touch a few of the subjects covered in this detailed, thorough, clearly written text. In part one, pages 1-56, the basic correspondence is introduced and the theory of linear line-manifolds is studied. The concept of projective angle between two non-special complexes which determine a nonparabolic congruence is presented. In part two, pages 50-132, ruled surfaces are studied. They correspond to  $K$ -curves on the  $K$ -quadric. The Chasles correlation and Lie osculating quadric are presented, as are five specially selected complexes which satisfy Frenet equations containing three projective curvatures. Separate additional sections go further into the affine and metric aspects of the theory. In part three, pages 131-249, line congruences are studied. They correspond to  $K$ -surfaces on the  $K$ -quadric. First, fundamental concepts like elementary surface and focal surface are presented. Then, studying the  $K$ -surfaces without reference to their imbedding, tensors  $a_{ik}$  and  $g_{ik}$  are introduced and their algebraic properties interpreted in affine and metric geometry. A metric, asymmetric, integrable connection is then considered and Frenet formulas for  $K$ -curves on the  $K$ -surfaces set up. Finally, the  $K$ -surfaces are studied as submanifolds of the  $K$ -space and a conformal connection is introduced in a natural way. The algebraic properties of congruences whose  $K$ -images have five, four, or three-dimensional secoid osculating spaces are studied, as are the fundamental equations of Gauss, Weingarten, Kühne, and Codazzi-Mainardi.

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*Václav Flavaty*

In part four, pages 300-469, complexes are studied. They correspond to three-dimensional manifolds on the  $K$ -quadratic. The principal correlation for a line in a given complex is considered. Then a conformal connection is introduced, leading again to the construction of Weingarten, Gauss, Codazzi-Mainardi, and Kühne fundamental equations. There follow detailed separate chapters on ruled surfaces in complexes, on line congruences in line complexes, and on ruled surfaces in line congruences in line complexes. In part five, pages 470-501, the line space is studied. Again fundamental tensors and a conformal connection are introduced, and the fundamental equations of Weingarten, Gauss, and Codazzi-Mainardi are derived. The line space is shown to be conformal Euclidean and its metric properties are studied in detail.

There was an attempt to make the various parts of the book independent, and hence there is some repetition. There are well chosen problems of varying difficulty distributed throughout the text, all illustrating and carrying further the material under consideration. There is a fine index at the end.

A. Schuster (State College, Pa.).

Source: Mathematical Reviews,

Vol 8 No 6

HLAVATY, VACLAV

\*Hlavaty, Václav. Projektivní Geometrie. II. Dvový-  
~~Parametrická~~ [Projective Geometry. II. Two-  
 Parameter Systems]. Melantrich, Prague, 1943. 562 pp.  
 The second volume of this text [cf. the preceding review]  
 deals with the projective geometry of two-parameter families  
 of linear and quadratic figures. The projective punctual and  
 lineal fields in a plane are studied by means of the projective  
 transformations from Klein's point of view and many syn-  
 thetic examples are constructed. Further, the non-Euclidean  
 hyperbolic (or elliptic) plane with elementary geometry is  
 studied. The foundation of projective geometry in the plane  
 is based on the theorems proved in the first volume and on  
 the analytic method. The complex points of the real straight  
 line are defined as double points of an elliptic involution.  
 The classification of the point-projective transformations is  
 based on the double points; that of the reciprocities is based  
 on the classification of the adjoint projective transforma-  
 tions. In the elementary Euclidean and non-Euclidean  
 geometry in the plane distance and angle are defined by  
 Laguerre's method. Some considerations, theorems and  
 constructions seem to be superfluous, because they follow  
 from analogous ones by the principle of duality.  
 F. Věchta (Prague).

Source: Mathematical Reviews,

Vol 11 No. 3

HLAVATÝ, V.

400

forms under (1) -- follows:  $Q_{\alpha}^{\beta} = Q_{\alpha}^{\beta} + \delta_{\alpha}^{\beta} \epsilon$  define a Weyl connexion in the  $W_n$ . If  $g^{\alpha\beta}(q)$  are the equations of  $W_n$  in  $W_n$ , the first, second, ... covariant derivatives of the vectors  $B_{\alpha}^{\beta} = \partial g^{\beta} / \partial x^{\alpha}$  at a point  $P$  define a local  $F_m$ . In each  $F_m$ , a system of  $m_1 - m_1$  mutually orthogonal unit vectors are chosen normal to the  $F_m$ , ( $M_{\alpha}^{\beta}$  is the tangent  $B_{\alpha}^{\beta}$ ). It is supposed that these vectors together with the  $B_{\alpha}^{\beta}$  constitute a system of  $n$  linear independent vectors  $M_{\alpha}^{\beta}$ . Then a connexion is defined by

$$\Gamma_{\alpha\beta}^{\gamma} = \delta^{\alpha\beta} a_{\alpha\beta} M_{\alpha}^{\gamma} (\nabla_{\alpha} M_{\beta}^{\gamma}) - Q_{\alpha} M_{\beta}^{\gamma}.$$

One part of these,  $\Gamma_{\alpha\beta}^{\gamma}$ , has tensor character. The remaining part defines another connexion. The linear expressions of the covariant derivatives belonging to this connexion of  $M_{\alpha}^{\beta}$  in terms of  $M_{\alpha}^{\beta}$  are called the Frenet formulas for a  $W_n$  in a  $W_n$ . The coefficients are called the curvatures. Some applications are given of the integrability conditions of these equations. A  $W_n$  in the  $W_n$  has curvatures with respect to the  $W_n$  and to the  $W_n$ . Relations between these curvatures are given in special cases. Details will be published later.

J. Hlavatý (Leiden).

SMW  
JH

Hlavatý, V. Théorie d'immersion d'une  $W_n$  dans  $W_n$ . *Ann. Soc. Polon. Math.* 21 (1948), 196-206 (1949).

A fundamental tensor  $a_{\alpha\beta}$  which is determined up to a transformation (1)  $a_{\alpha\beta} = \sigma^2 a_{\alpha\beta}$  and a quantity  $Q_{\alpha}$  which trans-

Source: Mathematical Reviews,

Vol 11 No. 3

*Hlavaty, V.*

*\*Hlavaty, V. Úvod do neeuclidovské geometrie. [Introduction to Non-Euclidean Geometry]. 2d ed. Jednota Československých Matematiků a Fysiků, Prague, 1949. 227 pp.*

This book for the layman contains only nonessential changes and complements to the first edition [1926]. The book does not contain the axiomatics of geometry. It starts from the elementary notions of the analytic geometry of the metric plane and deals with non-Euclidean geometry as the study of properties invariant with respect to a certain group of linear transformations. From this point of view it deals with the one-dimensional non-Euclidean variety and the varieties of the hyperbolic, elliptic, and parabolic plane.

*P. Věchlo (Prague).*

Source: Mathematical Reviews,

Vol 12, No. 3



HLAVATY, VACLAV

Hlavaty, Václav. The elementary basic principles of the unified theory of relativity. Introduction. J. Rational Mech. Anal. 3, 103-116 (1954).

[For parts A and B see same J. 1, 539-562 (1952); 2, 1-52 (1953); these Rev. 14, 416, 505. A closely related paper is that of Hlavaty and Sáenz, ibid. 2, 523-536 (1953); these Rev. 14, 1132.] In the current unified theory of Einstein, the asymmetric fundamental tensor  $g_{\mu\nu}$  and the affine connection  $\Gamma^{\lambda}_{\mu\nu}$  are related by the equations

$$(1) \quad \partial_{\mu} g_{\lambda\nu} = \Gamma^{\sigma}_{\mu\lambda} g_{\sigma\nu} + \Gamma^{\sigma}_{\mu\nu} g_{\lambda\sigma}, \quad \Gamma^{\lambda}_{\mu\nu} = \Gamma^{\lambda}_{\nu\mu},$$

together with a set of conditions that may be condensed into

$$(2) \quad R_{\mu\lambda} = \partial_{[\mu} X_{\lambda]},$$

$R_{\mu\lambda}$  being the contracted curvature tensor of  $\Gamma^{\lambda}_{\mu\nu}$ , and  $X_{\lambda}$  an arbitrary vector that may or may not be the gradient of a scalar. The present long paper, which is divided into two chapters, is wholly analytical, physical applications being reserved for later papers. Chapter I begins with the establishment of formulae necessary for the subsequent study of the bivector  $m_{\lambda\sigma}$  defined by

$$m_{\lambda\sigma} = -\frac{1}{2} \epsilon_{\lambda\sigma\alpha\beta} *g^{[\alpha\beta]} \sqrt{|g|},$$

where  $*g_{\lambda\sigma}$  is the fundamental alternating weighted tensor of components  $(\pm 1, 0)$ ,  $g = \det \|g_{\lambda\sigma}\|$  and  $*g^{[\alpha\beta]}$  is the contravariant tensor defined by  $*g^{[\alpha\beta]} g_{\lambda\sigma} = \delta^{[\alpha}_{\lambda} \delta^{\beta]}_{\sigma}$ . This bivector is to define the electromagnetic field in future papers. The later part of the chapter is concerned with the curvature tensor and with a tensor  $g_{\lambda\sigma}$  having special properties, the formulae obtained being required for subsequent purposes. In Chapter II the author deals with a conformal change of  $g_{\mu\nu}$  with path-preserving transformations

$$\Gamma^{\lambda}_{\mu\nu} = {}^0\Gamma^{\lambda}_{\mu\nu} + \delta^{\lambda}_{\mu} \rho_{\nu} + \delta^{\lambda}_{\nu} \rho_{\mu}$$

of the affine connection, and with existence problems. Using a particular solution, he builds up the most general solution of the systems of equations (1), (2), the method being one that enables him to pick out solutions that might be suitable

for physical applications. The chapter concludes with a particular case which will be treated from the physical point of view in the next of the three further papers promised by the author.

H. S. Ruse (Leeds).

Ruse

$a_A' \leq b_B'$ , then  $(a \vee a')_A \leq (b \vee b')_B$ ; and axiom (V), that if  $a_A \leq b_B$  and  $a_A' < b_B'$ , then  $(a \vee a')_A < (b \vee b')_B$ . Here  $\vee$  is the logical sum and  $<$  is the presence of  $\leq$  and absence of  $\geq$ . Axiom (VI): an outcome certain to occur has the relation  $\geq$  to an impossible outcome. Axiom (VII): an outcome certain in trial  $A$  has the relations  $\geq$  and  $\leq$  to such a one in trial  $B$ .

What we have here called "trials" the author calls "games," a notion which he amplifies in all formal precision. He introduces, by illustrations and by a general description, his idea of the group of a game (when the game has enough symmetry). Then axiom (VIII) states that, if  $a$  and  $b$  are congruent under the group of  $A$ ,  $a_A \geq b_A$  and  $a_A \leq b_A$ . This allows a Laplacian scheme to be given for the numerical definition of probabilities in games having transitive groups and, by comparison and passage to limits, in any other game. The system of axioms is completed with (IX): Let  $c$  and  $d$  be outcomes in  $A^k$  (the  $k$ -fold repetition of games like  $A$ ) and let  $c \leq d$ ; let  $a$  be an outcome in  $A$ . Then on a  $(k+1)$ -fold repetitive game  $(a$  with  $c) \leq (a$  with  $d)$ .

As the author points out clearly in his first footnote, his approach to probability coincides with the reviewer's [B. O.

Source: Mathematical Reviews 2/3 Vol 9 No. 9

Koopman, *Ann. of Math.* (2) 41, 269-292 (1945); 42, 169-187 (1945); these *Rev.* 1, 245; 2, 227]. The differences are (1) in scope: the author's is less general than the reviewer's, chiefly because the latter considers partially ordered systems with regard to  $\leq$  as the general case; (2) in method: the author uses the group of a game to get numerical probabilities; the reviewer used probability scales, the existence of which he axiomatized.

We find difficulty with the notion of the group of a game, not as abstract concept, but in any concrete application. If absolute symmetry is required, the game (if one existed!) would get into trouble with determinism: if all the conditions in the universe were symmetric with regard to the tossing of a coin, it would come down on an edge and spin on it through all eternity. If the game were symmetric only by ignoring certain factors (as is always done), there might be danger of ignoring the wrong ones unless the conditions under which they could be ignored were given; and such a statement of conditions would seem to have to be made in language involving the  $\leq$  relation. But then axiom (VIII) would seem to be a theorem, deducible from the other axioms.

B. O. Koopman (New York, N. Y.).

Source: *Mathematical Reviews*,

Vol

No.

Hlavatý, Václav. The elementary basic principles of the unified theory of relativity. C. Applications. I. J. Rational Mech. Anal. 3, 147-179 (1954).

[For parts A, B, C, of this investigation, see same J. 1, 539-562 (1952); 2, 1-52 (1953); these Rev. 14, 416, 505; and the paper reviewed above. See also Hlavatý and Sáenz, ibid. 2, 523-536 (1953); these Rev. 14, 1132.] The affine connection of the unified theory may be expressed in the form

$$\Gamma_{\lambda\mu}^{\nu} = \left\{ \begin{matrix} \nu \\ \lambda\mu \end{matrix} \right\} + S_{\lambda\mu}^{\nu} + U_{\lambda\mu}^{\nu},$$

where the Christoffel symbols are formed from the symmetric part  $h_{\lambda\mu}$  of the fundamental tensor  $g_{\lambda\mu}$ , and  $S_{\lambda\mu}^{\nu}$  is the torsion-tensor for which, by assumption,  $S_{\lambda\mu}^{\alpha} = 0$ . In this paper the author takes the special case in which  $U_{\lambda\mu}^{\nu} = 0$ , a condition which imposes a structural restriction on  $g_{\lambda\mu}$  and which is automatically satisfied for weak electromagnetic fields. He reserves the case  $U_{\lambda\mu}^{\nu} \neq 0$  for a later paper. He obtains the equations

$$H_{\lambda\mu} - \frac{1}{2} H h_{\lambda\mu} = T_{\lambda\mu},$$

where  $H_{\lambda\mu}$  is the contracted curvature-tensor of  $h_{\lambda\mu}$ , and  $T_{\lambda\mu}$  is a well-defined function of all arguments that enter into the total momentum-energy tensor of gravitational theory in the presence of an electromagnetic field. The tensor  $T_{\lambda\mu}$  satisfies the equation  $D_{\lambda} T^{\lambda\mu} = 0$ , where  $D_{\lambda}$  denotes covariant differentiation with respect to  $\Gamma_{\lambda\mu}^{\nu}$ , and from this is obtained an equation

the form of which, as well as the method of obtaining it, suggests that it is to be interpreted as giving the equations of motion of a photon or of a particle according as the vector  $w^{\lambda}$  (in the language of general relativity, not used by the author and not here really appropriate) is null or non-null. Possible observational tests are discussed. Towards the end of the paper the author replicates the Einstein equations  $\partial_{[\mu} R_{\nu\lambda]} = 0$  by another set of four differential equations expressed in terms of the torsion-tensor, and obtains the equations of motion

$$w^{\lambda} D_{\lambda} w^{\mu} = \sigma w^{\mu}.$$

From these he concludes that a particle moving in the  $g_{\lambda\mu}$ -field under no external forces describes autoparallel lines of  $g_{\lambda\mu}$ , which are identical with the geodesics of  $h_{\lambda\mu}$ . The unified theory thus obtained yields the same results for the three "crucial tests" as general relativity, but these tests are not crucial for the unified theory.

This review gives only a bare indication of the kind of work the paper contains, and is based to a large extent upon the author's own synopsis. Out of his investigation, which, including the present paper, has already occupied 155 pages,

may emerge a satisfactory unified theory. That is evidently the author's hope, and he guides the reader, as well as anyone could, through the mass of formulae, assumptions, calculations and references back with which a theory based upon asymmetric  $g_{\mu\nu}$  and  $F_{\mu\nu}$  inevitably abounds. To the reviewer it seems, however, that the theory must be shown capable of drastic simplification if it is to gain any acceptance. The question whether any significant advance in physical theory is likely to be made on these lines at all is perhaps a matter of personal prejudice.

H. S. Rueda

CZECHOSLOVAKIA

HLAVATY, V., BENDOVA, L., BLEKTA, M., BENDEL, J., VALNICEK, S., TRNKOVA, M., CHYTIL, M; Biophysical Institute, Faculty of General Medicine, Charles University, 2nd. Gynecological Clinic, Faculty of General Medicine, Charles University; State Institute for Drug Control; 2nd. Internal Clinic, Faculty of Gen. Medicine, Charles University (Biofysikalni Ustav Fak. Vseob. Lek. KU; II. Porodnicko-Gynekologicka Klinika Fak. Vseob. Lek. KU; Statni Ustav pro Kontrolu Leciv; II. Interni Klinika Fak. Vseob. Lek KU) Prague.

"Changes in the Volume of Circulating Blood During Physiological Pregnancy and in Late Gestosis."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 93-94

Abstract: The amount of circulating blood and plasma starts increasing in the 9th. week of pregnancy and reaches a maximum in the 2nd. trimester; at the end of pregnancy the volume of plasma decreases. In late gestosis the volume of circulating blood and plasma begin to decrease as early as the 2nd trimester. No references. Submitted at "16 Days of Physiology" at Kosice, 27 Sep 65.

CZECHOSLOVAKIA

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618030004-9

HLAVATY, V., BENDOVA, L., BLEKTA, M., BENDEL, J., VALNICEK, S., TRNKOVA, M., CHYTIL, M; Biophysical Institute, Faculty of General Medicine, Charles University, 2nd. Gynecological Clinic, Faculty of General Medicine, Charles University; State Institute for Drug Control; 2nd. Internal Clinic, Faculty of Gen. Medicine, Charles University (Biofysikalni Ustav Fak. Vseob. Lek. KU; II. Porodnicko-Gynekologicka Klinika Fak. Vseob. Lek KU; Statni Ustav pro Kontrolu Leciv; II. Interni Klinika Fak. Vseob. Lek KU), Prague.

"Changes in the Total Amounts of Serum Proteins and Their Fractions During Physiological Pregnancy and Late Gestation."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 94

Abstract: During normal pregnancy the concentration of blood proteins and albumin decreases, concentration of globulin and the total amount of serum protein increase; the amount of albumin reaches a peak in the 2nd trimester and reverts to pre-pregnancy levels. In late gestation the decrease in proteins and albumins is greater; globulins do not increase. No references. Submitted at "16 Days of Physiology" at Kosice, 27 Sep 65.

HLAVATY, Vladimir; JEZEK, Stanislav

The uniform standard as a means of reducing the work involved  
in production. Prace mada 11 no.4:169-174 Ap '63.

HLAVATY, V.

Cadmium sulfite roentgen dosimeter. Sborn. lek. 62 no.6:153-157  
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1. Biofyzikalni ustav lekarske fakulty University Karlovy v Praze,  
prednosta doc. dr. Zdenek Dienstbier.  
(RADIOMETRY equip & supply)  
(SULFITES)



HLAVATY, V.; HELBICH, J.; KOFRANEK, V.

Review of works on radiobiological and radio-hygienic problems  
published in Czechoslovakian medical periodicals during 1959.  
Cas.lek.cesk 100 no.3:Lek veda shar:6-12 20 Ja '61.

1. Biofyzikalni ustav lekarske fakulty KU, Praha. Ustav hygieny  
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(RADIOLOGY bibliog)

HLAVATY, V.; VITEK, F.

Effect of physical factors on the biological response in experimental animals irradiated with roentgen rays. Cesk. rentgenol. 16 no.4:250-258 Ag '62.

1. Biofyzikalni ustav fakulty vseobecneho lekarstvi University Karlovy, prednosta doc. dr Z. Dienstbier.

(RADIATION EFFECTS exper)

HLAVATY, Vlastislav; DIENSTBIER, Zdenek; ZAK, Miroslav

Effect of ionizing irradiations on changes in the phosphene threshold of the retina. Sborn. lek. 64 no.7:202-207 J1 '62.

1. Biofyzikalni ustav fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta doc. dr. Zdenek Dienstbier.

(RADIATION EFFECTS exper) (RETINA radiation eff)

(PHOSPHORUS chemistry)

VANECEK, J.; HLAVATY, V.; technicka spoluprace RYBOVA, B.; FIALOVA, O.

Protective influence of phenol and procaine on radiation sickness.  
Cas. lek. cesk. 102 no.11:295-296 15 Mr '63.

1. Farmakologicka katedra fakulty detskeho lekarstvi KU v Praze --  
Farmakologicka laborator CSAV, prednosta prof. dr. H. Raskova, DrSc. --  
Ustav lekarske fyziky fakulty vseobecneho lekarstvi KU v Praze,  
prednosta doc. dr. Zd. Dienstbier.

(RADIATION INJURY, EXPER.) (PHENOLS) (PROCAINE)  
(RADIATION-PROTECTIVE AGENTS)

HLAVATY, V.; ZAK, M. Technicka spoluprace: BENDOVA, L.

Changes in the conductivity of the blood serum following a single total-body roentgen irradiation in rabbits. Sborn. lek. (Praha) 66 no.4:111-115 Ap'64.

1. Biofyzikalni ustav fakulty vseobecneho lekarstvi University Karlovy v Praze; prednosta: doc.dr. Z.Dienstbier, CSc.

\*

PRADAC, J.; HLAVATY, V.

Adaptation of the organism during fractionated X-ray treatment.  
A contribution to the problem. Neoplasma (Bratisl) 12 no.2:  
187-191 '65.

1. Institute of Biophysics, Faculty of General Medicine,  
Charles University, Prague, Czechoslovakia.

L 7866-66 EWT(m)

ACC NR: AP6001209

SOURCE CODE: CZ/0038/65/011/006/0223/0224

AUTHOR: Hlavaty, Vlastislav; Trousil, Jaroslav

ORG: [Hlavaty] Biophysics Institute FVL UK, Prague (Biofyzikalni ustav FVL UK);  
[Trousil] Institute for Research, Production, and Utilization of Radioisotopes,  
Prague (Ustav pro vyzkum, vyrobu a vyuziti radioizotopu)

TITLE: The magnetron--a source of x radiation

SOURCE: Jaderna energie, v.11, no.6, 1965, 223-224

TOPIC TAGS: magnetron, x radiation, radiation dosimetry, ionizing radiation,  
 radiation source

ABSTRACT: Doses of x radiation were measured around a radar installation designed with magnetrons containing resonant cavities. The doses were measured with the aid of film-badge dosimeters, and the radiation energy to which the radar personnel are exposed was determined. It was found that the ionizing radiation is emitted from various parts of the magnetron. Monitoring of the personnel showed that the tolerance doses specified were not exceeded. With consideration for the x radiation, design modifications are recommended in the production of this type of magnetrons. The work was presented by I. Bucina. Orig. art. has: 1 figure. [NA]

SUB CODE: 18, 06, 09 / SUBM DATE: none / ORG REF: 004 / OTH REF: 006

SOV REF: 003

UDC: 621.385.64

Card 1/1

BLEKTA, M.; BAKOS, K.; HLAVATY, V.; ANDRYSEK, O.; TRUKOVA, M.; BENDL, J.;  
VALNICEK, S.; CHYTIL, M.; BENDOVA, L.

Isotope examination methods in obstetrics. Isotope nephrography, measurement of the blood volume with I-131, serum albumin level test with the use of erythrocytes labeled with Cr-51. Cesk. gynek. 30 no.1:122-127 Mr'65.

1. II. gyn.-por. klinika; Biofyzikalni ustav; II.interni klinika fakulty vseobecneho lekasrtvi Karlovy University v Praze; Statni ustav pro kontrolu leciv v Praze.



HLAVATY, V.; BLEKTA, M.; TRNKOVA, M.; CHYTIL, M.; BENDL, J.; VALNICEK, J.;  
BENDOVA, L.

Some new information on changes in the volume of circulatory plasma and blood proteins during physiological pregnancy and late gestation. Cas. lek. Cesk. 104 no.51:1405 17 D '65.

I. Biofyzikalni ustav fakulty vseobecneho lekarstvi Karlovy University v Praze (prednosta prof. dr. Z. Dienstbier, DrSc.),  
II. gynekologicko-porodnicka klinika fakulty vseobecneho lekarstvi Karlovy University v Praze (prednosta prof. dr. J. Lukas, DrSc.), Statni ustav pro kontrolu leziv v Praze a  
II. interni klinika fakulty vseobecneho lekarstvi Karlovy University v Praze (prednosta prof. dr. F. Herles, DrSc.).

SVEC, F.; HLAVAYOVA, E.

Effect of digitoxin upon the synthesis of acetylcholine and the consumption of oxygen by brain tissue. Chekh.fiziol.2 no.2:183-189 '53. (MLRA 7:2)

1. Onkologicheskiy Insitut, otdeleniye eksperimental'noy fiziologii i Farmakologicheskiy institut, Bratislava.  
(Brain) (Acetylcholine) (Glycosides) (Oxygen)

HLAVAYOVÁ, E.

Metabolism of the nerve modulator acetylcholine in malignant experimental tumors. I. František Švec and Hlavayová (Oncological Inst., Bratislava, Czech.). *Chim. Listy* 92, 210-12 (1933). Crocker tumor and adenocarcinoma C<sub>11</sub> were analyzed for acetylcholine (I) and K. I was detd. by aid of the contractions of an isolated frog heart (Straub method); K was detd. spectrophotometrically with Na<sub>2</sub>Co(NH<sub>3</sub>)<sub>6</sub>. The av. values for I were 1.5 γ/g. of Crocker tumor, and 2.8 γ/g. of C<sub>11</sub>. The various layers of these tumors contain different amounts of I. In the outer layers, where the necrosis is not progressed, more I is found. The more necrosis progresses, also the K diminishes the more the necrosis progresses. It is suggested that the I in these cells has the function of a hormone.

Werner Jacobson

SVEC, F.; HLAVAYOVA, E.

Metabolism of acetylcholine in experimental cancer. *Čas. lek. česk.* 92  
no.8:210-213 20 Feb 1953. (CLML 24:3)

1. Of the Department of Experimental Physiology of the Institute of  
Oncology, Bratislava.

HLAVAYOVA, E

# CZECH

Activity of acetylcholinesterase in experimental tumors. František Švec and Blana Hlavayová (Onkologický ústav, Bratislava, Czech.). *Neurologica* 1, 14-19 (1954) (in German).—Manometric estns. of acetylcholinesterase (I) in organs of normal and tumorous CBA-mice and in Rous chicken sarcoma were made in Warburg's app. at pH 7.2-7.4 and 37.5°. The activity of I is expressed in cu. mm. CO<sub>2</sub> per mg. tumor or organ tissue per 1 hr.: adenocarcinoma of strain C<sub>3</sub>H, 6.29; Crocker's sarcoma, 2.83; Rous chicken sarcoma, av. 4.73. The relatively low activity of I in Crocker's sarcoma is explained by the rapid necrosis of the tumor. There were no substantial differences in the I values of the surface and the central part of the tumors. The organs of mice in advanced stages of the disease revealed the same activities as analogous organs of controls: liver, 50.53; heart muscle, 9.44; kidney, 4.59. These results prove that in tumorous diseases the activity of I in the internal organs remains unchanged. L. J. Urbánek

SVEC, Frantisek; HLAVAYOVA, Elena

Cholinesterase activity in experimental tumors. Cesk. onkol.  
1 no.1:14-19 1955.

1. (Onkologisches Institut, Bratislava). Prof. dr. F. Svec,  
Bratislava, Skarniclova 45. Dr. E. Hlavayova, Bratislava,  
Heydukova 20.

(NEOPLASMS, experimental,  
cholinesterase metab. in)  
(CHOLINESTERASE, metabolism,  
in exper. cancer)

KLAVAYOVA, E.

Metabolism of iron in experimental tumor disease  
 by N. V. Kozlov and E. Klavayova (Vysokomol. Soedin. 1974  
 Czechoslovakia, 2, 37, 38(1974)). The iron  
 content of Fe was determined in mice: normal mice 51.48  $\pm$   
 1.10  $\mu$  Fe/g of body wt.; sarcomatous mice 42.78  $\pm$   
 1.21  $\mu$  Fe/g. sarcomatous tissue 26.25  $\pm$  0.93  $\mu$  Fe/g.  
 The increase of Fe content (by 12%) in sarcomatous mice  
 after implantation of the tumor was not proportional to the  
 increase of body wt. (by 36.25%); this reveals an Fe de-  
 ficiency of about 7.78% of the total content of Fe compared  
 with the controls. However, this Fe deficiency was not  
 proportional to the considerable anemia and leads to the  
 conclusion that the ability to utilize Fe for the formation  
 of hemoglobin is impaired in the sarcomatous organism.

L. J. Hrubek

*HLAVAYOVA, E.*  
HLAVAYOVA, E., Dr.; KOSSEY, P., MUDr (Bratislava, ul. CSA 17)

Metastases of rat tumor BS-1 after intratesticular transplantation.  
Cesk.onkol. 2 no.2-3:133-137 1955.

1. Vyskumny ustav onkologicky v Bratislave.

(NEOPLASMS, transplantation,

intratesticular implant of rat tumor BS-1, metastases)

(TESTES, neoplasms,

exper. implants of tumor BS-1 in rats, metastases)



SVEC, F.; HLAVAYOVA, E.; DITTERTOVA, V.; Technicka asistence odbornych laborantov: NEMCEKA, V.; KOSECKEJ, L.; TOTHOVEJ, G.

On the problem of the pharmacology and toxicology of 6-azauracil-riboside, Cas. lek. cesk. 102 no.19:505-511 10 My '63.

1. Vyskumny ustav onkologicky v Bratislave, riaditel doc. dr. V. Thurzo. Oddelenie farmakodynamiky CSAV - Chemickeho ustavu SAV v Bratislave, prednosta MUDr. F. Selecky, CSc.  
(RATS) (RABBITS) (CATS) (NUCLEOSIDES)

CZECHOSLOVAKIA/Tumors

U-4

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 27738

Author : Thurzo, V., Svoc, F., Hlavayova, E., Kossay, P.

Inst : Not Given

Title : Experimental Erythroleukemia Induced by Cell-free Filtrates from Rat Tumors.

Orig Pub : Ceskosl onkol., 1956, 3, No 4, 267-269

Abstract : Of 58 seven-day old rats that had received 0.3 ml. of cell-free extract of rat BS carcinoma (a mixed mesenchymal epithelial malignant neoplasm) subcutaneously, 12 (20%) developed erythroleukemia after 6-9 months. The disease was characterized by hepatomegaly, splenomegaly, lymphadenopathy, enlargement of the thymus and the presence of tumor masses in the abdominal cavity. The erythrocyte blood count reached 200,000 per cu.mm., accompanied by decreases in erythrocyte counts and Hb and the presence of a significant number of myeloblasts, myelocytes and 20-40 erythroblasts per 100 leukocytes. The bone marrow differential count contained an

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U-4

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 27738

increase in myeloblasts and young cells of erythroid series.  
Internal organs and lymph nodes were found to be infiltrated  
by the round-shaped cells.

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HLAVAYOVA, Elena; SMIDA, J.; ALTANER, C.; SYEC, F.

Pathogenicity of virus B77 in rats. Folia biol. (Praha) 10 no.4:  
301-306 '64.

1. Institute of Oncology, Department of Experimental Pathology,  
Bratislava.